

PETRI NYKÄNEN
MOBILE WEB SERVICES
28449 (4208-4008)

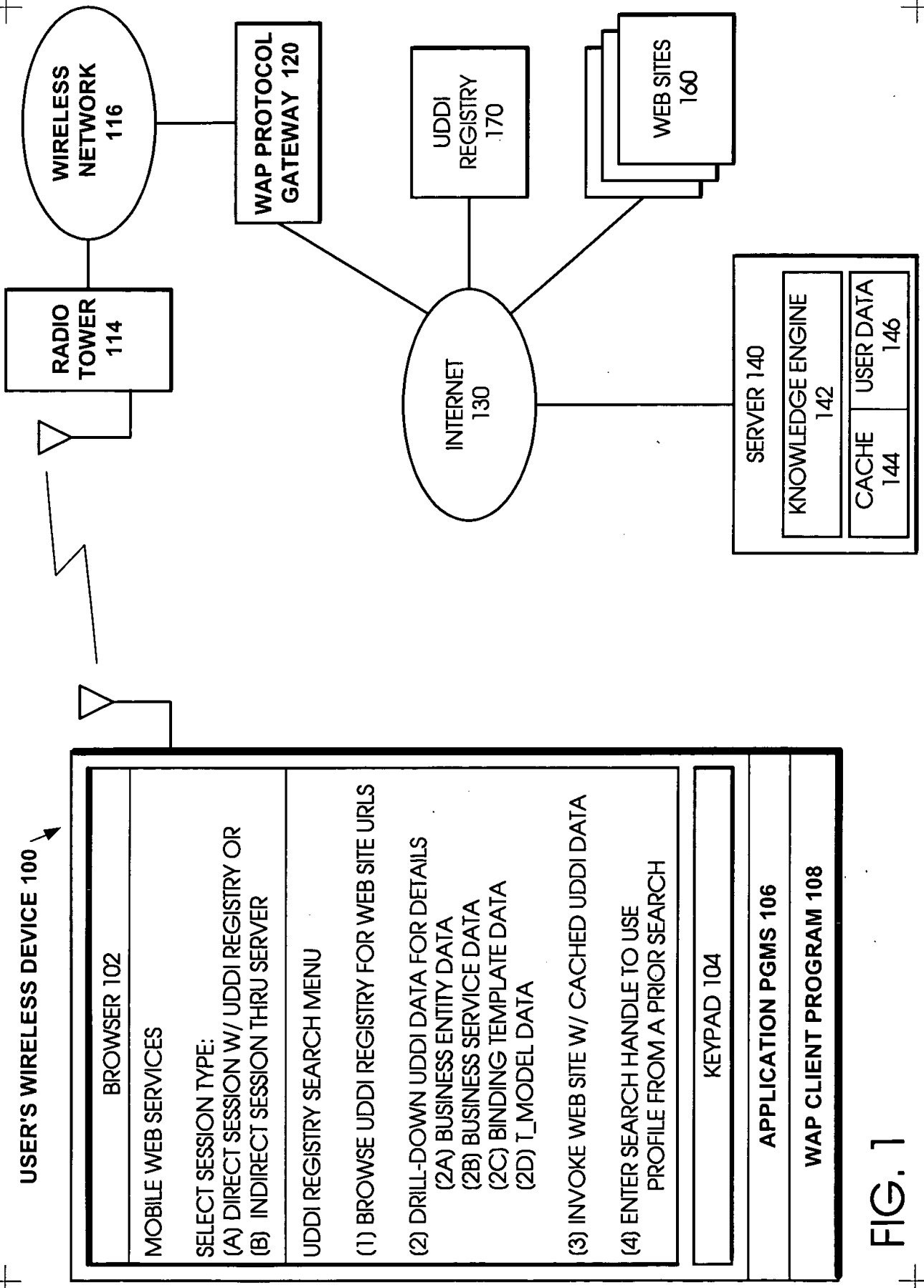


FIG. 1

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>RESULTS FROM BROWSING UDDI REGISTRY</p> <p>UNDER SEARCH HANDLE " STOCKS_ "</p> <p>RETURNED businessList MESSAGE:</p> <p>(1) WALL STREET JOURNAL ONLINE</p> <p>(2) CNBC FINANCIAL NEWS</p> <p>(3) MOTLEY FOOL FINANCIAL NEWS</p> <p>(4) YAHOO FINANCIAL NEWS</p> <p>SELECT ITEM FROM RETURNED LIST</p> <p>OR</p> <p>CONTINUE BROWSING</p>	<p>KEYPAD 104</p>
<p>APPLICATION PGMS 106</p>	
<p>WAP CLIENT PROGRAM 108</p>	

FIG. 1B

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>BROWSE UDDI REGISTRY FOR WEB SITE URLS</p> <p>ENTER SEARCH HANDLE " STOCKS_ "</p> <p>ENTER LETTERS OF FIRST TERM " WALL STREET_ "</p> <p>IS THIS A BUSINESS NAME? Y/N " Y_ "</p> <p>IS THIS A SERVICE NAME? Y/N " N_ "</p> <p>ENTER LETTERS OF SECOND TERM " FINANC*_ "</p> <p>IS THIS A BUSINESS NAME? Y/N " Y_ "</p> <p>IS THIS A SERVICE NAME? Y/N " N_ "</p> <p>SEND " find_business_ "</p> <p>XML INQUIRY WITH SOAP PROTOCOL</p>	<p>KEYPAD 104</p>
<p>APPLICATION PGMS 106</p>	
<p>WAP CLIENT PROGRAM 108</p>	

FIG. 1A

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>RESULTS FROM BROWSING UDDI REGISTRY UNDER SEARCH HANDLE " STOCKS "</p> <p>RETURNED serviceList MESSAGE FOR WALL STREET JOURNAL ONLINE:</p> <p>(1) TECH STOCK NEWS (2) DRUG STOCK NEWS (3) ENERGY STOCK NEWS (4) COMMODITIES NEWS</p> <p>SELECT ITEM FROM RETURNED LIST OR CONTINUE BROWSING</p>	<p>KEYPAD 104</p>
<p>APPLICATION PGMS 106</p>	
<p>WAP CLIENT PROGRAM 108</p>	

FIG. 1D

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>SELECT ITEM FROM RETURNED LIST</p> <p>DRILL-DOWN BUSINESS ENTITY DATA " WALL STREET JOURNAL ONLINE "</p> <p>SEND " find_service " XML INQUIRY WITH SOAP PROTOCOL</p>	<p>KEYPAD 104</p>
<p>APPLICATION PGMS 106</p>	
<p>WAP CLIENT PROGRAM 108</p>	

FIG. 1C

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>RESULTS FROM BROWSING UDDI REGISTRY UNDER SEARCH HANDLE "_STOCKS_"</p> <p>RETURNED serviceDetail MESSAGE FOR TECH STOCK NEWS:</p> <p>(1) AEROSPACE (2) COMPUTERS (3) COMPUTER SOFTWARE (4) TELECOMMUNICATIONS</p> <p>SELECT ITEM FROM RETURNED LIST OR CONTINUE BROWSING</p>
KEYPAD 104
APPLICATION PGMS 106
WAP CLIENT PROGRAM 108

FIG. 1F

WIRELESS DEVICE 100

<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>SELECT ITEM FROM RETURNED LIST</p> <p>DRILL-DOWN BUSINESS SERVICE DATA "_TECH STOCK NEWS_"</p> <p>SEND "_get_serviceDetail_" XML INQUIRY WITH SOAP PROTOCOL</p>
KEYPAD 104
APPLICATION PGMS 106
WAP CLIENT PROGRAM 108

FIG. 1E

WIRELESS DEVICE 100



<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>RESULTS FROM REPLAYING UDDI SEARCH USING SEARCH HANDLE "_STOCKS_"</p> <p>RETURNED accessPoint URLs</p> <p>FROM BINDING TEMPLATE DATA</p> <p>IN RETURNED serviceDetail MESSAGE</p> <p>FOR "_COMPUTERS_"</p> <p>URL = "_www.wsj.com/news/computers_"</p> <p>URL = "_www.wsj.com/quotes/computers_"</p> <p>URL = "_www.wsj.com/graphs/computers_"</p> <p>SELECT ITEM FROM RETURNED LIST</p> <p>OR</p> <p>CONTINUE BROWSING</p>	KEYPAD 104
APPLICATION PGMS 106	
WAP CLIENT PROGRAM 108	

FIG. 1J

WIRELESS DEVICE 100



<p>BROWSER 102</p> <p>MOBILE WEB SERVICES</p> <p>ENTER SEARCH HANDLE TO USE</p> <p>PROFILE FROM A PRIOR SEARCH</p> <p>ENTER SEARCH HANDLE "_STOCKS_"</p> <p>SELECT TYPE OF SEARCH:</p> <p>(1) GET WEB PAGES FROM WEB SITE</p> <p>(2) REPLAY UDDI REGISTRY SEARCH STRATEGY</p>	KEYPAD 104
APPLICATION PGMS 106	
WAP CLIENT PROGRAM 108	

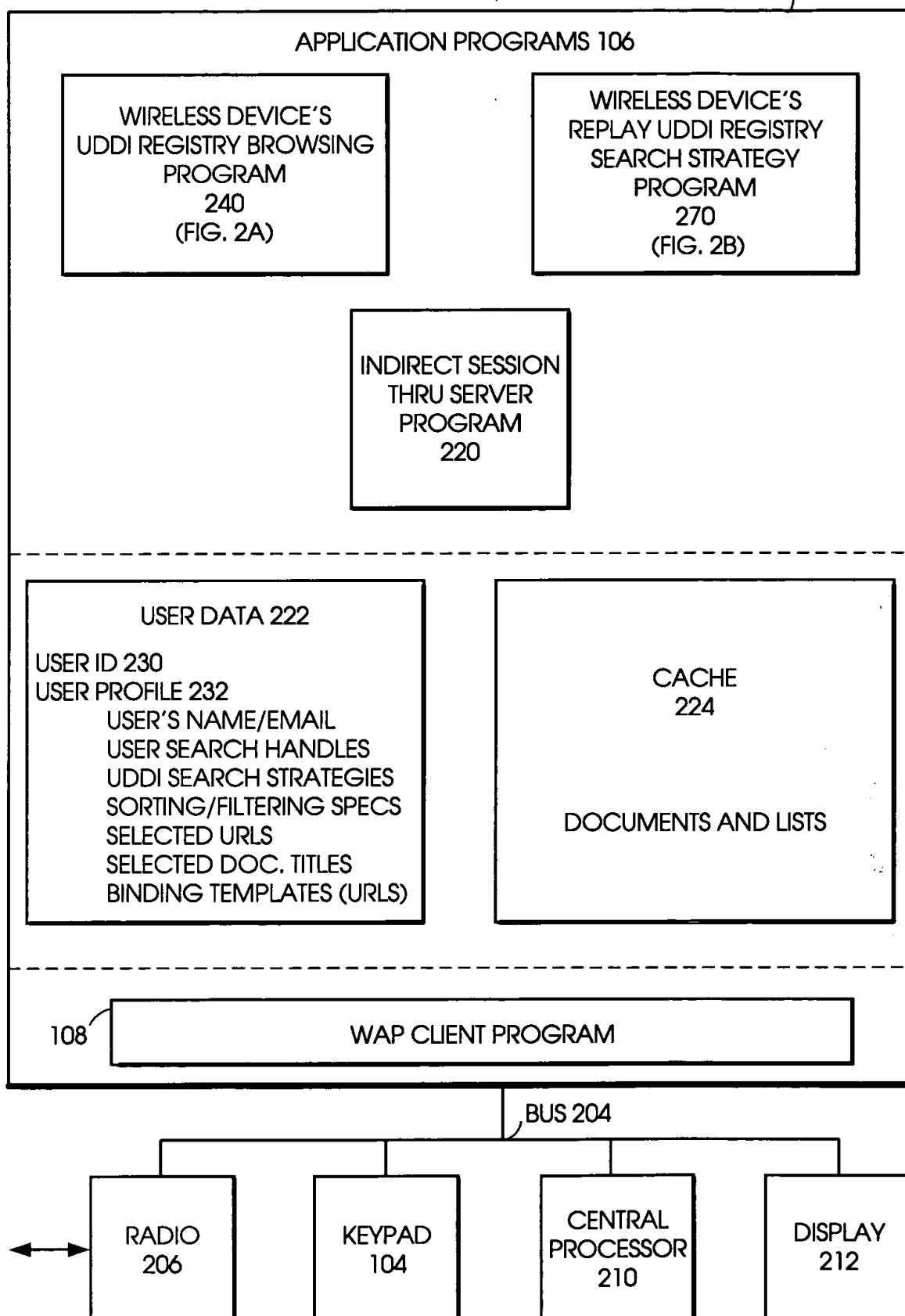
FIG. 1I

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FIG. 2

WIRELESS DEVICE 100

MEMORY 202



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FIG. 2A

WIRELESS
DEVICE'S
UDDI
REGISTRY
BROWSING
PROGRAM
240

WIRELESS DEVICE BROWSING UDDI REGISTRY
ENTER SEARCH HANDLE "_STOCKS_" 250

ENTER QUERY TERMS "_WALL STREET_" + "_FINANC*_" 252
IS THIS A BUSINESS NAME? Y/N "_Y_"
IS THIS A SERVICE NAME? Y/N "_N_"

SEND "_find_business_" XML INQUIRY WITH
SOAP PROTOCOL TO UDDI REGISTRY 254

SELECT ITEM FROM RETURNED businessList MESSAGE
DRILL-DOWN BUSINESS ENTITY DATA 256
"_WALL STREET JOURNAL ONLINE_"

SEND "_find_service_" XML INQUIRY WITH
SOAP PROTOCOL TO UDDI REGISTRY 258

SELECT ITEM FROM RETURNED serviceList MESSAGE
DRILL-DOWN BUSINESS SERVICE DATA 260
"_TECH STOCK NEWS_"

SEND "_get_serviceDetail_" XML INQUIRY
WITH SOAP PROTOCOL TO UDDI REGISTRY 262

SELECT ITEM OF RETURNED serviceDetail MESSAGE
DISPLAY accessPoint URL 264
FROM bindingTemplate DATA "COMPUTERS"
IN RETURNED serviceDetail MESSAGE
URL = "_www.wsj.com/news/computers_"

STORE SEARCH HANDLE "_STOCKS_" IN USER PROFILE WITH
SELECTED URL = "_www.wsj.com/news/computers_" 266

STORE SEARCH HANDLE "_STOCKS_" IN USER PROFILE WITH
UDDI REGISTRY SEARCH STRATEGY: 268
BUSINESS NAME QUERY "_WALL STREET_" + "_FINANC*_"
businessEntity DATA SELECTED "_WALL STREET JOURNAL ONLINE_"
businessService DATA SELECTED "_TECH STOCK NEWS_"
bindingTemplate DATA SELECTED "_COMPUTERS_"
accessPoint URL SELECTED "_www.wsj.com/news/computers_"

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FIG. 2B

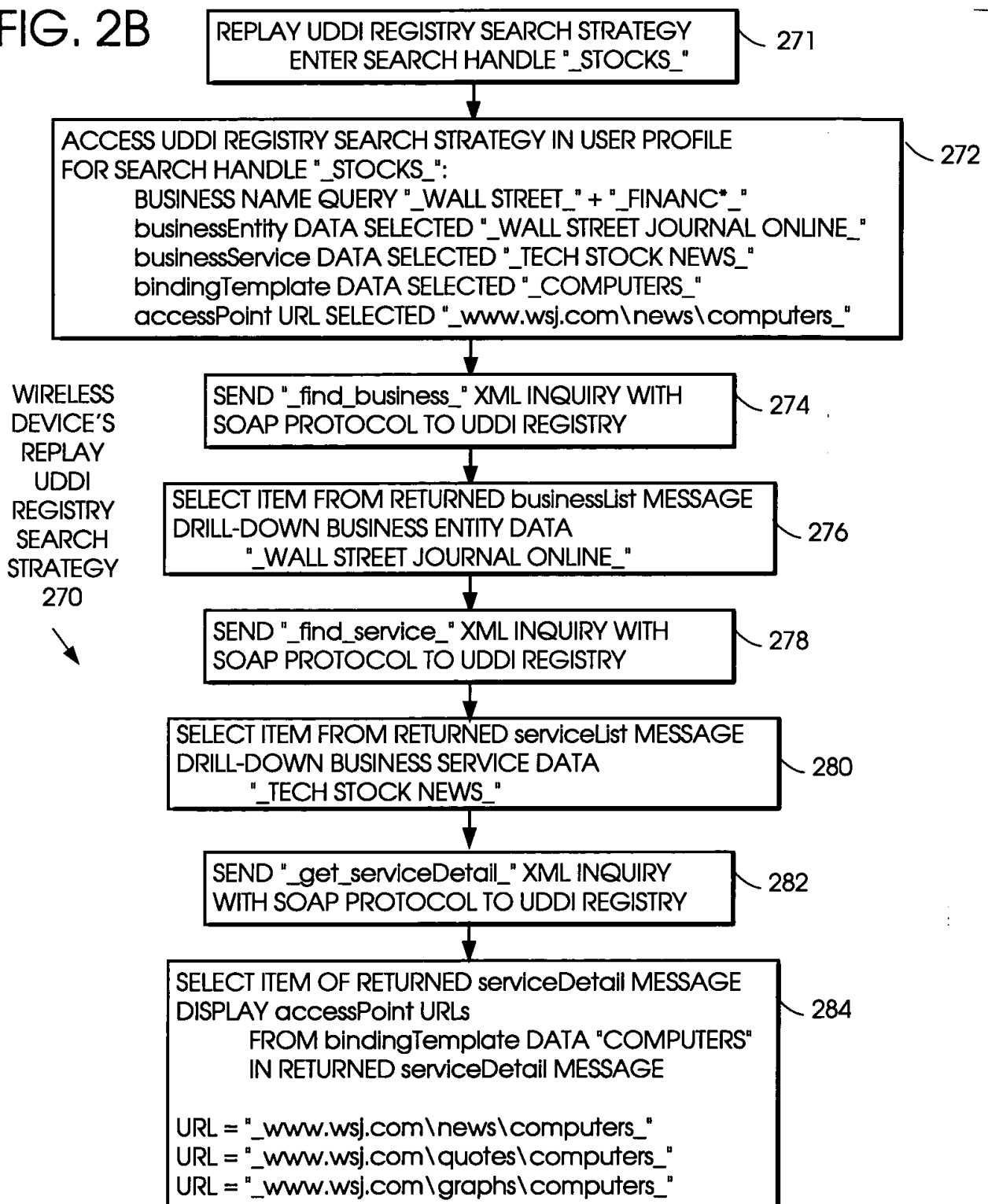


FIG. 3A

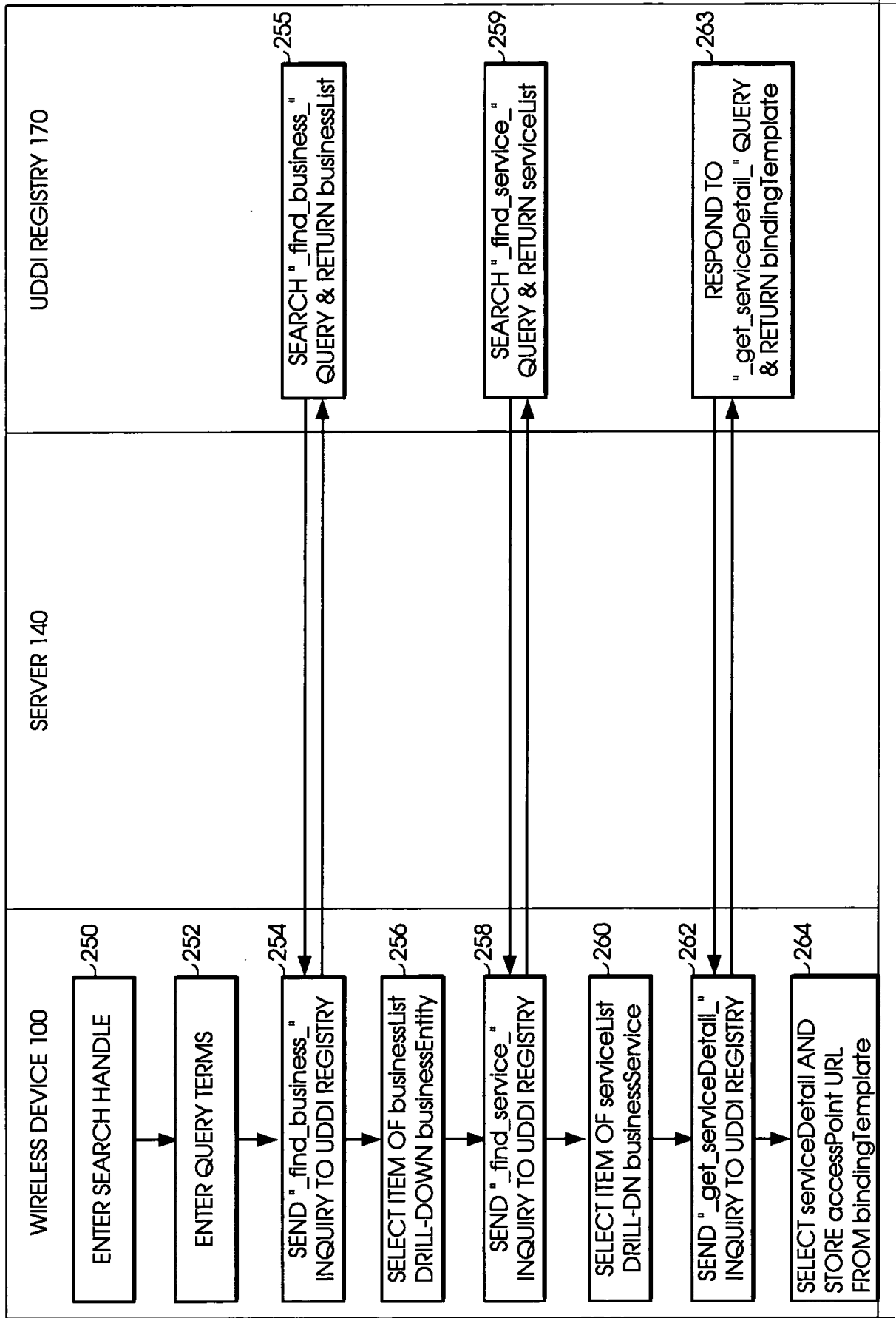
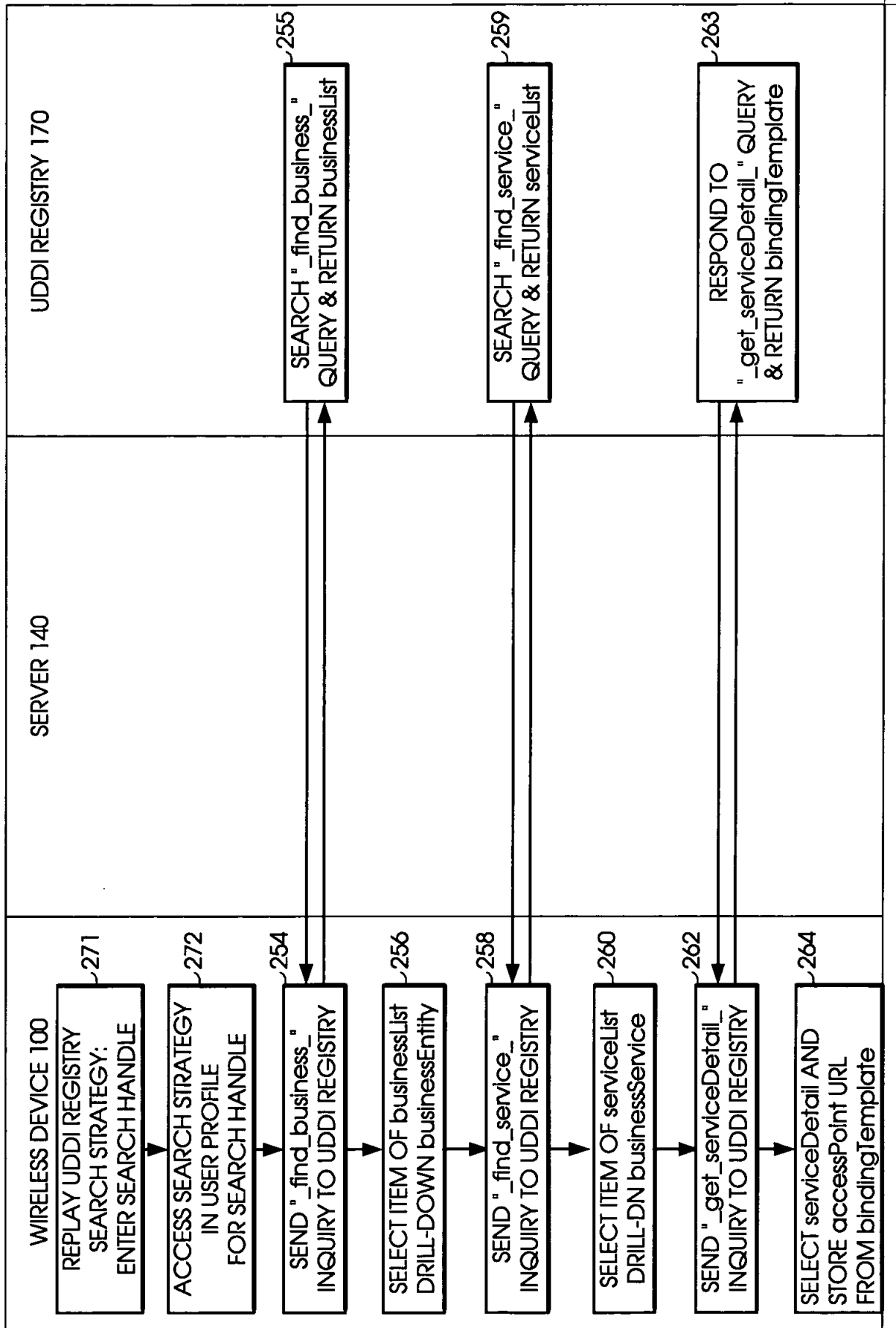


FIG. 3B



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FIG. 4

SERVER 140

MEMORY 402

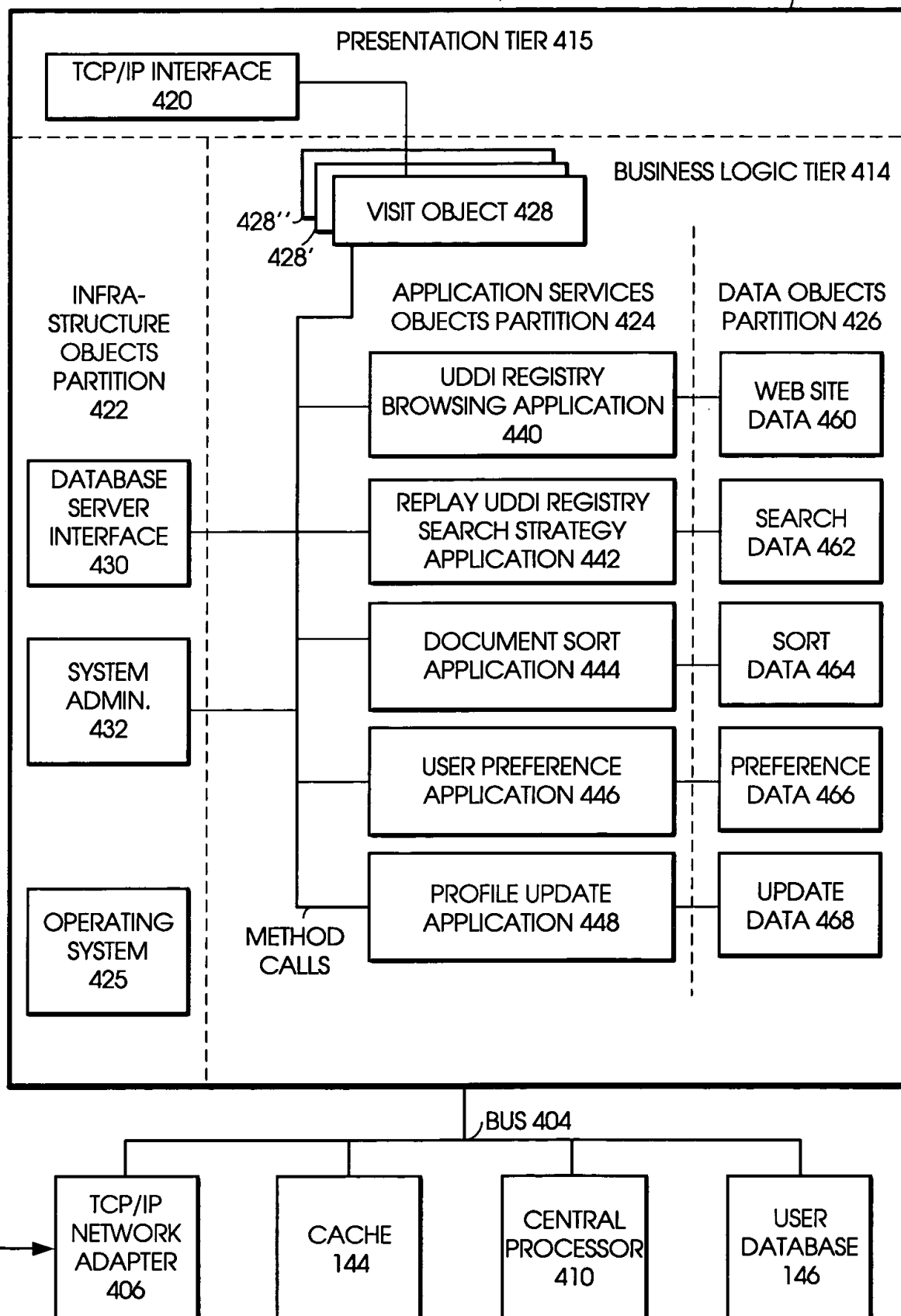


FIG. 4A

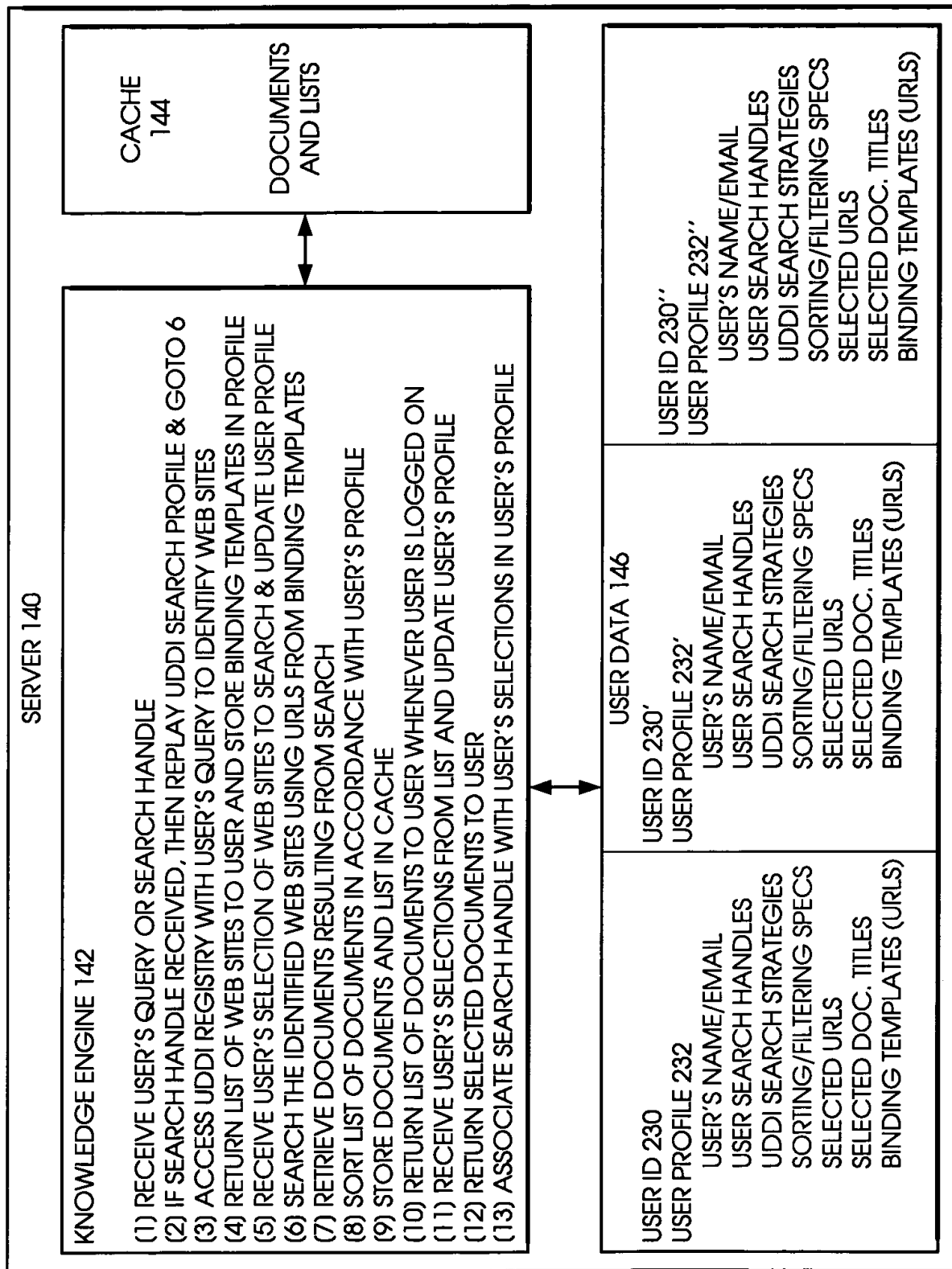


FIG. 4B

